16 January 1956

Engineering Report No. 20

Prepared by: WAS

Surveyor: ETE

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A line was laid out running from the N.E. corner of the 25X1

E hangar to the center of the target circles on the lake.

Direction N 5° W, Compass Length 10,761 $\neq I$ ft.

1. Purpose:

To Survey an accurate line for determination of photographic scale.

2, Location

25X1

- 3. Equipment:
 - 3.1 Chain: Lufkin 2001 Standard Steel tape.

Temperature coefficient: 0.000 0645 ft/°F Deviation from 68°F.

- 3.2 Transit: Berger and Sons.
- 4. Conditions:
 - 4.1 Compass N 5° W. Transit used to line every point and chain length. Line error less than 1/2 ft. at any point.
 - 4.2 Approximate temperature.

2 P. M. 55° F

3:45 P. M. 45° F

4:30 P.M. 40° F

- 4.3 Chain Tension: 15 lbs., measured by spring balance.
- 4:4 Compass Declination: Approximately 16° 30' Easterly.
- 5. Temerature Correction:

Max. correction = 0.0000645(68-40) = 0.00018 ft.

NOT SIGNIFICANT

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6. Traverse Data:

| Traverse #1 | | | | #2 | | | |
|-------------|------------|--------------------------|------------|---------------------|------------|-----------------------|--|
| Date | | 13 January | | 14 January 1956 | | | |
| Time Star | rt | 2:30 P. N | л. | 2:00] | P. M. | | |
| Time Stop | | 4:45 P. N | 4:45 P.M. | | 3:45 P. M. | | |
| | Elevation | Chain | Distance | Chain | Distance | Corrected Distance | |
| Point l | ≠5'Approx. | 0 Start . | | | * | | |
| | | 2.0 10 chains 2.82 | 2004.82 | 10 chains 4 4.90 | 2004.90 | 2004: 86 | |
| Point 2 | 0 | | | | | | |
| | | 10 chains | 2000.00 | 10 chains 4 .09 | 2000.09 | 2000.04 | |
| Point 3 | 0 | | | | | | |
| | | 10 chains | 2000 | 10 chains | 2000 | 2000 | |
| Point 4 | 0 | | | | | 2000.06 | |
| | | 10 chains | 4000 | 10 chains # .12 | | 2000.00 | |
| Point 5 | Ò | | | | | | |
| Point 6 | | 10 chains | 2000 | 13 chains | 2756.11 | 2756.17 | |
| | | | | 4 156.1 | | | |
| Point 7 | 0 Datum | 756. 23' | 756.23 | 0 Start | | | |
| Z OILL ! | - Datujii | | Ip. 761.05 | | 10.761.22 | 10, 761 13 | |

7. True Distance: $10,761 \pm 1$ ft.

